rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

Low-rise residential building means any building three stories or less in height above grade that includes sleeping accommodations where the occupants are primarily permanent in nature (30 days or more).

New Federal building means any building to be constructed by, or for the use of, any Federal agency which is not legally subject to State or local building codes or similar requirements. A new building is a building constructed on a site that previously did not have a building or a complete replacement of an existing building from the foundation up.

Proposed building means the building design of a new Federal low-rise residential building proposed for construction.

 $[71\ \mathrm{FR}\ 70283,\ \mathrm{Dec}.\ 4,\ 2006,\ \mathrm{as}\ \mathrm{amended}\ \mathrm{at}\ 72\ \mathrm{FR}\ 72571,\ \mathrm{Dec}.\ 21,\ 2007;\ 76\ \mathrm{FR}\ 49285,\ \mathrm{Aug}.\ 10,\ 2011]$ 

# § 435.3 Materials incorporated by reference.

(a) General. The Department of Energy incorporates by reference the energy performance standards listed in paragraph (b) of this section into 10 CFR part 435. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standardsetting organization will not affect DOE regulations unless and until DOE amends its energy performance standards. Material is incorporated as it exists on the date of the approval, and a notice of any change in the material will be published in the FEDERAL REG-ISTER. All approved material is available for inspection at the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945. Also, this material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

- (b) ICC. International Code Council, 500 New Jersey Avenue, NW., 6th Floor, Washington, DC 20001, 1–888–ICC–SAFE or (202) 370–1800, or go to http://www.iccsafe.org/Pages/default.aspx.
- (1) ICC International Energy Conservation Code (IECC), 2004 Supplement Edition ("IECC 2004"), January 2005, ISBN 7801S04, IBR approved for §§ 435.2, 435.4, 435.5;
- (2) ICC International Energy Conservation Code (IECC), 2009 Edition ("IECC 2009"), January 2009, ISBN 978-1-58001-742-8, IBR approved for §§ 435.2, 435.4, 435.5.

[76 FR 49285, Aug. 10, 2011]

## § 435.4 Energy efficiency performance standard.

- (a)(1)All Federal agencies shall design new Federal buildings that are low-rise residential buildings, for which design for construction began on or after January 3, 2007, but before August 10, 2012, to:
- (i) Meet the IECC 2004 (incorporated by reference, see §435.3), and
- (ii) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the IECC Baseline Building 2004.
- (2) All Federal agencies shall design new Federal buildings that are low-rise residential buildings, for which design for construction began on or after August 10, 2012, to:
- (i) Meet the IECC 2009 (incorporated by reference, see §435.3), and
- (ii) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the IECC Baseline Building 2009.
- (b) Energy consumption for the purposes of calculating the 30 percent savings shall include space heating, space cooling, and domestic water heating.
- (c) If a 30 percent reduction is not life-cycle cost-effective, the design of the proposed building shall be modified so as to achieve an energy consumption level at or better than the maximum

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level of energy efficiency that is lifecycle cost-effective, but at a minimum complies with paragraph (a) of this section.

[71 FR 70283, Dec. 4, 2006, as amended at 72 FR 72571, Dec. 21, 2007; 76 FR 49285, Aug. 10, 2011]

## § 435.5 Performance level determination.

- (a) For Federal buildings for which design for construction began on or after January 3, 2007, but before August 10, 2012, each Federal agency shall determine energy consumption levels for both the IECC Baseline Building 2004 and proposed building by using the Simulated Performance Alternative found in section 404 of the IECC 2004 (incorporated by reference, see § 435.3).
- (b) For Federal buildings for which design for construction began on or after August 10, 2012, each Federal agency shall determine energy consumption levels for both the IECC Baseline Building 2009 and proposed building by using the Simulated Performance Alternative found in section 405 of the IECC 2009 (incorporated by reference, see § 435.3).

[76 FR 49285, Aug. 10, 2011]

#### § 435.6 Sustainable principles for siting, design and construction. [Reserved]

# § 435.7 Water used to achieve energy efficiency. [Reserved]

### § 435.8 Life-cycle costing.

Each Federal agency shall determine life-cycle cost-effectiveness by using the procedures set out in subpart A of 10 CFR part 436. A Federal agency may choose to use any of four methods, including lower life-cycle costs, positive net savings, savings-to-investment ratio that is estimated to be greater than one, and an adjusted internal rate of return that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

### Subpart B—Voluntary Performance Standards for New Non-Federal Residential Buildings [Reserved]

## Subpart C—Mandatory Energy Efficiency Standards for Federal Residential Buildings

#### §435.300 Purpose.

- (a) This subpart establishes voluntary energy conservation performance standards for new residential buildings. The voluntary energy conservation performance standards are designed to achieve the maximum practicable improvements in energy efficiency and increases in the use of non-depletable sources of energy.
- (b) Voluntary energy conservation performance standards prescribed under this subpart shall be developed solely as guidelines for the purpose of providing technical assistance for the design of energy conserving buildings, and shall be mandatory only for the Federal buildings for which design for construction began before January 3, 2007
- (c) The energy conservation performance standards will direct Federal policies and practices to ensure that cost-effective energy conservation features will be incorporated into the designs of all new Federal residential buildings for which design for construction began January 3, 2007.

[53 FR 32545, Aug. 25, 1988, as amended at 71 FR 70284, Dec. 4, 2006]

#### § 435.301 Scope.

- (a) The energy conservation performance standards in this subpart will apply to all Federal residential buildings for which design of construction began before January 3, 2007 except multifamily buildings more than three stories above grade.
- (b) The primary types of buildings built by or for the Federal agencies, to which the energy conservation performance standards will apply, are:
- (1) Single-story single-family residences;
- (2) Split-level single-family residences;
- (3) Two-story single-family residences:
  - (4) End-unit townhouses;
- (5) Middle-unit townhouses:
- (6) End-units in multifamily buildings (of three stories above grade or less):